



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/849,509

05/19/2004

Laurence C. Mudge

BAYERC 3.0-001 RE

6774

530 7590 02/25/2009
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/849,509	Applicant(s) MUDGE, LAURENCE C.	
	Examiner ALTON N. PRYOR	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-17, 20-35, 37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17, 20-35, 37, 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Upon review of the claims and applicant's argument filed 8/22/08, the Examiner has decided that the combination of the references was not proper since they have various different antibacterial uses. Fenn et al. teach a method of controlling *Rhizotonia solani* fungi, whereas the Kamimura (JP 63112701) or Myajima et al. reference does not teach a method of controlling *Rhizotonia solani* fungi. For this reason it is improper to combine Fenn et al. with Kamimura or Myajima et al. The rejection is withdrawn.

The Obviousness type double rejections as stated in the office filed 7/7/08 are withdrawn because the claims are amended to exclude an ethylenebisdithiocarbamate contact fungicide.

The Oath form PTO/SB/52(05-08) and the statement under 37 CFR 3.73(b) form PTO SB/96 filed 8/22/08 are acceptable.

Upon further consideration, a new ground(s) of rejection is set forth below.

Index of Claims

Claims 1-8,10-17,20-35,37 and 38 are pending and under consideration.

Claim Objections

Claim 38 is objected to because of the following informalities: A misspelling ("power" should be --- powder ---). Appropriate correction is required.

New Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-17, 20-35, 37 and 38 are obviousness over **Lucas 5,336,661 (8/94: filed 10/91), printout of** <http://www2.siri.org/msds/f2/bzz/bzzsc.html>, for ingredients in Rohm and Haas Co.'s FORE.TM. FUNGICIDE, 62440 (7/24/1991) and **Collins 5,206,228 (4/93).**

Lucas teaches (see examples 1-8) using on turfgrass fungicidal treatment formulations comprising:

a.1 part by weigh of certain monoester salts of phosphorous acid, for example fosetyl-Al (preferably Aliette.TM.) and

b.1.5 to 2.5 parts by weigh of mancozeb (preferably FORE.TM.).

The FORE.TM. brand of mancozeb contains 70% mancozeb and 1-2% of copper phthalocyanato(2-) which is a phthalocyanine compound also known. as Pigment Blue 15. See <http://www2.siri.org/msds/f2/bzz/bzzsc.html>, for ingredients in Rohm and Haas Co.'s FORE.TM. FUNGICIDE, 62440.

Accordingly, Lucas teaches turfgrass formulations comprising:

a.1 part of certain monoester salts of phosphorous acid, for example fosetyl-Al (preferably Aliette.TM.) and

b.1.5 to 2.5 parts of mancozeb (preferably FORE.TM.) and

c. < 1 part by weight of Pigment Blue 15 as the phthalocyanine compound.

The Lucas ALIETTE and FORE formulations comprising the above ingredients realized significant improvements in turf color as compared to other Mancozeb containing formulations lacking Pigment Blue 15. See col. 5-6. Lucas further teaches the use of its

Art Unit: 1616

compositions as “wetable powders” (as in instant claim 21 and 38) and “aqueous suspensions” (as in instant claims 20 and 37). See Lucas col. 3.

The Lucas reference composition and method differs from the instant claims insofar that it fails to teach:

a. the substitution of the anti-fungal agent mancozeb with a different antifungal agent such as phosphorous acid or alkali/alkaline earth metal salt thereof (for all the instant claims) In this regard, it is noted that mancozeb is an ethylenebisdithiocarbamate fungicide excluded from the instant claims;

b. the substitution of Pigment Blue 15 with a different phthalocyanine compound (only instant claims 4, 17, 27 and 35).

Collins teach the anti-fungal use of BOTH monester salts of phosphorous acid AND phosphorous acid or alkali/alkaline earth metal salt thereof for the added benefit of controlling arthropod pests when applied to plants including turf. See Abstract; patent claims 1-18, including claim 9 drawn to turf; and col. 10. Collins additionally teaches, interchangeably, the further incorporation of various colorants into its plant treatment formulations including metal phthalocyanine dyestuffs. See col. 12, especially lines 10-22.

Accordingly, one of ordinary skill in the art at the time of applicant's invention would have been motivated to modify the Lucas reference turf treating composition containing mancozeb to substitute the Collins reference phosphorous acid or alkali/alkaline earth metal salt since they both possess analogous anti-fungal activities with the added benefit of increase pesticide resistance found in the Collins phosphorous acid or alkali/alkaline earth metal salt fungicide.

Art Unit: 1616

Additionally, Collins provides motivation to one of ordinary skill in the art to substitute one functionally equivalent phthalocyanine compound for another i.e. substitute the use of Pigment Blue 15 with a different phthalocyanine dye compound.

Thus, it would have been prima facie obvious to one of ordinary skill in the art at the time of filing of the instant claimed invention to substitute the Luca mancozeb fungicide with the Collins phosphorous acid or alkali/alkaline earth metal salt thereof fungicide for added pesticide resistance as taught by Collins and where necessary substitute a different phthalocyanine dye for Pigment Blue 15 in the Lucas composition to attain analogous colorant properties as taught by Collins.

Claims 1-8,10-17,20-35,37,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gullino et al. (Chemical control of dollar spot and brown patch of turfgrass in Italy, Mededelingen - Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen, Universiteit Gent, 1995, 60, 2b Proceedings, 47th International Symposium on Crop Protection, pt. 2, 1995, 367-70), Fenn et al (Phytopathology, 74 (5), pp. 606-611), Kato et al. (JP 02138376; 5/28/06) and Nagashima et al. (JP 03221576; 9/30/91).

Applicant's claims are drawn to a synergistic fungicidal composition comprising a monoester salt of a phosphorous acid or phosphorous acid or alkali or alkali earth metal salt thereof plus a phthalocyanine compound such as Pigment Blue 15. Applicant's claims are also drawn to a method of applying said composition to turfgrass to combat fungi growth and enhance turfgrass quality.

Art Unit: 1616

Gullino et al. teach that the fungus *Rhizotonia solani* causes brown patches in turfgrass, such as, bentgrass and bermudagrass (page 367 summary section and pp. 368-9 result section). Gullino et al. do not teach that the phosphorous compounds in claims 1,10-14,22-25,31 and 32 are used to combat *Rhizotonia solani* in turfgrass. However, Fenn et al. teach that phosphorous acid and fosetyl-Al are fungicides used to control *Rhizotonia solani* (pages 609-610 discussion section). It would have been obvious to apply phosphorous acid or fosetyl-Al to the turfgrass recited in claims 1,6,7,29,30 to kill *Rhizotonia solani*. Neither Gullino et al. nor Fenn et al. teach the use of a phthalocyanine compound such as pigment blue 15 listed in claims 2-5,8,10,15-17,22-28,31-35. However, Kato et al. teach that green dye can be applied to brown dead lawn areas in golf courses (turfgrass) to restore the desired green appearance to golf courses (page 2). Nagashima et al. teach that a pigment blue 15 colorant can be added to dead grass to restore the color of grass (pages 8-9). It would have been obvious to one having ordinary skill in the art to add pigment blue 15 to phosphorous acid or fosetyl-Al. One would have been motivated to do this because while phosphorous acid or fosetyl-Al would control/kill the fungus, *Rhizotonia solani*, responsible for causing brown or dead spots in the turfgrass (golf course), the pigment blue 15 would restore the desired green appearance to turfgrass.

The combination of references excludes an ethylenebisdithiocarbamate contact fungicide recited in claims 1,10,24 and 32 which is a requirement of the present claims. With respect to the instant amount of phthalocyanine and fosetyl-Al or phosphorous acid, one having ordinary skill in the art would have been able to determine the optimum

Art Unit: 1616

amount of phthalocyanine and fosetyl-Al or phosphorous acid. One would have been motivated to do this in order to make a composition that would have been most effective in controlling fungal growth and restoring color without destroying the turfgrass. With respect to the physical form of the composition recited in claims 20,21,37 and 38, one would have expected all physical forms of the actives to be effective absent a showing of unexpected results. With respect to the term "synergistic" used in the claims to describe the combined activity of said phthalocyanine and fosetyl-Al or phosphorous compound, the Examiner would like to point out that all of the examples in the specification and declarations showing synergism include mancozeb. The Examiner further points out that Applicant does not provide examples showing synergism for a combination comprising only phosphorous acid or fosetyl-Al plus a phthalocyanine lacking the fungicide (mancozeb). The claims are not commensurate in scope with the examples provided in the declarations.

Other Matters

Most Recent Amendment: Fails to PROPERLY Amend claim 1 in conformance with the patented claim. See failure to position "(i)" properly relative to the patent claim.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

Art Unit: 1616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616